# **NOAA Education Council Meeting**

Date/Time: January 18, 2006 (9:00–12:00 pm)

Location: SSMC3, Room 13836

Dial-in: 866.453.7960

Passcode: 360528

(Contact: 202.379.6686 in case of telecom problems)

### **AGENDA**

9:00 Welcome/Opening Remarks

9:15 Council AOP

9:45 Strategies for Success in NOAA Education

10:30 Council Policies and Procedures

10:45 Updates/Announcements

11:15 Upcoming Council Meetings: Proposed Dates/Agenda Items

- February 15, 2006
  - o B-WET Program Activities & Evaluation
  - o Chesapeake Bay Interpretive Buoys Program
- March 15, 2006
- Proposed Agenda Items
  - o NOAA Education Training—WCM Pilot Implementation
  - o NERRS IOOS Education

11:30 Adjourn

### **NOAA Education Council Meeting**

January 18, 2006

In attendance: Louisa Koch (OEd), Kim Benson (OEd), Carrie McDougall (OEd), Frank Niepold (Climate), Carla Wallace (PPI), Percy Thomas (NWS), Christos Michalopoulos (OEd), Atziri Ibanez (NERRS), Paula Keener-Chavis (OE), Jennifer Hammond (NMAO), Michiko Martin (NMSP), Gene Cope (Fisheries), Janice Beattie (Library), Nina Jackson (NESDIS), Jacqueline Rousseau (OEd), Meka Laster (OEd), Janine Montgomery (PA), Bob Hansen (PA), Ron Gird (NWS), Sarah Schoedinger (OEd), Tom Cox (NOS), Liz McMahon (NMAO); On Phone: Jorgeanne Hiebert (OAR), Rene Carson (OEd), Beth Jewell (OEd), Deborah MacArthur (Fisheries-Alaska), Shannon Sprague (NCBO), Krista McCraken (NOS-CSC)

### **Updates**

Helping America's Youth Inventory, a Presidential Request for information

# Send any info by 3:30pm TODAY to Kim and Christos

Sojourner Douglas College receives a grant from NWS

MERITO would fit the description (Atziri will seek info from Michiko)

Teach a kid to fish day (Gene Cope will send info)

Jorgeanne will coordinate OAR and solicit input from Sea Grant.

Is the Satellites and Education Conference in LA a possibility? Ron Gird will send info.

Emerging Scientist Program at NCBO, Shannon will send info

NOAA partnership with JASON with Boys and Girls Club, Paula sent info

OceanAGE (OE's marine careers web site)

#### **Council AOP**

PPI is requiring all Council's to submit an AOP this year (for the first time).

Deadline to submit final AOP to PPI is Jan. 20.

### Send your input to Kim by COB Jan. 19.

The AOP is a tracking document for execution. We are seeking education and outreach milestones. Milestones are events that capture the significance of a program, a tangible deliverable of a program.

Please send information about NOAA's most significant education programs with milestones and a description of tracking mechanisms (if any).

Send the dollar value and #s reached for each milestone (if you have this info).

Check with your Program's AOP first, if there are any education milestones that were included in your program's AOP send that info.

Currently there is more information and detail about OEd's programs included on the draft spreadsheet/AOP, but we would like to replace some of these less significant milestones with more significant milestones submitted by the education programs.

Make sure entries are clear as to what they are, that is, is the milestone a workshop, a conference.

The AOP will serve as a useful tracking tool for education for the Ed Council and we will have to report out on how well we are meeting these milestones.

Very significant NOAA-wide outreach events are appropriate for inclusion.

Council recommends to PPI that in the future, Council and LO AOPs have a deadline that follows the deadline for the Program's AOP so that these AOPs can draw from the program's AOPs.

## Strategies for Success in NOAA Education

We need a clearer sense of what we are trying to achieve in education at the NOAA level and at the goal level. We have committed to the Climate and Ecosystems goals to help define education goals, strategies and performance measures.

Environmental Literacy is the umbrella that is appropriate to encompass all that NOAA does. We need to define the essential principles that underlie "Environmental Literacy" and we'll need to involve the external community in this process.

Ecosystem goal has a mandate to build stewardship in the general public, whereas Climate and Weather and Water do not have this mandate. Therefore there will always be more activity and effort in Ecosystems.

Ocean Literacy effort and California's environmental literacy effort are two models for us. Kim presented the following model for discussion purposes:

	Audiences (decreasing in population size as you move to the right)				
States of	K-12 &	Teachers	Community/Economic	Resource	Sci & Tech
awareness	Gen.		Leaders, Policy,	Managers	Workforce
& learning	Public		Decision Makers		
(from NEETF					
paper)					
Enviro	CT	CT	CT	CT	
Awareness					
Enviro	WW	WW			
Knowledge					
Enviro	Cli, Eco	Cli, Eco	Cli, Eco	Cli, Eco	CT, WW
Literacy					CLI, ECO

CT = Commerce & Transportation, WW = Weather & Water, Cli = Climate, Eco = Ecosystems

Note: The delineating horizontal lines between these states of knowledge are blurry, see p. 54-57 in the NEETF
paper: Environmental Literacy in America.

The levels of knowledge presented in this model are similar to Bloom's 6-level Taxonomy in Education Theory. (Bloom Benjamin S. and David R. Krathwohl. Taxonomy of Educational Objectives: The Classification of Educational Goals, by a committee of college and university examiners. Handbook I: Cognitive Domain. New York, Longmans, Green, 1956.)

The level of effort/activity required to achieve the states of awareness increases as you move down the rows. Individuals must move through each of the rows as they move toward environmental literacy.

This model provides a framework for considering various questions regarding NOAA education:

Where within these cells should we be focusing our efforts? The focus areas suggested by the outcomes, objectives, and/or strategies of the NOAA mission goals are represented above.

How are our current efforts focused?

What knowledge areas or target audiences is NOAA uniquely positioned to impact? NOAA should not necessarily have a role in each of the cells shown above. Achieving environmental literacy is a national effort that involves many entities.

### Time Line

Our goal is to have preliminary environmental literacy objectives defined for the Climate and Ecosystems Goals for the FY09 PPBES process by April-May 2006.

We need a working group of the Council to further this effort. Initial Council members volunteering to serve on this working group: Atziri, Paula, Michiko, Frank, Tom, Percy, and Jennifer with Kim as facilitator.

The working group will articulate preliminary environmental literacy objectives for the Climate and Ecosystems Goals to assist planning and programming activities during the FY09-13 PPBES process.

Working Group will meet weekly.

Updates on the working groups progress will be provided during the monthly Council meetings with a draft of the preliminary NOAA E-Lit objectives for Ecosystems and Climate to be presented to Council in April Council meeting. At that time, the Council will also reexamine the objectives of the Weather and Water Goal in the context of the working group's preliminary proposal and determine how to move forward to address any omissions.

Additionally, we need to discuss how to catalyze a larger, external effort to define environmental literacy nationally. This will be a much longer term and slower effort.

We need to base this effort on the national science literacy effort that currently exists, but we can't limit ourselves to science-based outcomes. We need to ensure we define the behavior changes required or why an individual should care as a result of an improved understanding of science principles to make informed decisions. And this may require a regional approach.

### **New Policies and Procedures for Council**

- Meetings are open to interested participants
  - o Email Kim Benson to add names to the distribution/scheduling lists
  - o Although it is a voting body, Council operates generally through consensus
  - o Technically only full members can vote, not alternates, ex officio members (i.e., NOAA Library, PA&E, PPI), staff, or interested participants.
  - Council members sit at table and non-members sit around room periphery.
     Kim will send out list of official Council members for all to review.
  - At this time, we do not anticipate the need to make Council operations more formal in response to increased meeting participation
  - o Recommendation of Council: We should ensure every LO has a representative at each meeting.
- Agenda Development
  - o Ideas and suggestions for discussion topics are welcome, send to Kim.
  - We will begin sending out requests for suggestions at the beginning of each month

#### **Updates/Announcements**

- AMS annual meeting and WeatherFest is coming up. VADM Lautenbacher will be visiting the GA Aquarium while he is in GA.
- Environmental Literacy Grants: Letters of Interest are due Jan. 25 at 5pm EST.
- Science on a Sphere RFA for installations will be coming out separately and within the next 2 months.
  - We need to ensure that SOS content that is developed will work on Magic Planet and that content that is developed for Magic Planet can be translated to work on SOS.

- Hollings Scholarship: We're working on securing slots for internships for existing scholars. About 2/3 of the scholars have already identified internships in which they are interested. A template is being developed that will be sent out to Council members to solicit other internship opportunities. The Council members are very interested in being involved in establishing internship opportunities for scholars. The goal is to provide a full suite of internship opportunities at NOAA to the students earlier on in their first scholarship year. We just were not able to fully implement this in the first year of the program. In the next few weeks we will be sending out an email to the DAAs asking for internship opportunities for this summer and the Admiral will discuss the Hollings Scholarship Program at the upcoming series of NOAA Town Halls.
- A few months ago there was a data call from PCO requesting information from all
  of the programs about internship opportunities
- "Stormy" a weather-knowledgeable robot is another technology we may want to review at some point.
- NOAA Heritage Week is week of Feb. 6.
- NOAA's Budget-Constituent Briefing in Feb. 9 at the Press Club.
- Janine Montgomery is the new outreach manager for NOAA's Outreach Office
- Jan. 20 "Team NOAA" will be on line.
- OE has begun partnership discussions with the GA Aquarium to offer OE teacher workshops.
- NOAA's Climate Program will be attending the Alaska Forum on the Environment in February and brokering a discussion on International Polar Year (IPY)
- Library is compiling a list of NOAA's polar resources.

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  - Magic Planet "Tour" (Tom and Nina will coordinate to ensure this occurs.)